Urinating after Sexual Intercourse Prevents Pregnancy: Adolescents' Misconceptions of Reproductive Health Knowledge

Buang air kecil Pascahubungan Seks Mencegah Kehamilan: Kekeliruan Pemahaman Remaja Yang Menjadi Masalah Kesehatan Reproduksi

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Abstrak

Latar belakang: *Kesehatan reproduksi remaja pada masa ini menuntut perhatian semua pihak. Banyaknya kasus seks pranikah, kehamilan yang tidak diinginkan dan aborsi di kalangan remaja menuntut pemerintah dan semua pihak yang berkepentingan mengambil sebuah tindakan untuk mengatasinya. Kurangnya pengetahuan remaja tentang kesehatan reproduksi ditengarai menjadi penyebab utama remaja melakukan perilaku seks beresiko.*

Tujuan: *Penelitian ini bertujuan mengukur tingkat pengetahuan kesehatan reproduksi remaja dan menganalisa faktor-faktor yang mempengaruhinya.*

Metode. *Penelitian ini merupakan penelitian kuantitatif dengan pendekatan cross sectional yang melibatkan 320 orang siswa sekolah menengah di kota Semarang. Data dikumpulkan dengan mempergunakan angket yang mengukur tingkat pengetahuan remaja tentang kesehatan reproduksi dan hal yang berkaitan dengan seksualitas.*

Hasil: *Enam puluh persen remaja mempunyai tingkat pengetahuan yang rendah. Miskonsepsi terjadi pada isu seputar terjadinya kehamilan dimana sebagian besar mereka beranggapan bahwa buang air kecil setelah berhubungan seksual dapat menghindarkan si gadis dari kehamilan. Sebagian lagi beranggapan bahwa kehamilan tidak akan terjadi pada hubungan seks yang pertama. Teman sebaya dan media terbukti signifikan sebagai prediktor pengetahuan remaja.*

Kesimpulan: *Dengan banyaknya remaja yang mempunyai tingkat pengetahuan rendah dan banyaknya miskonsepsi seputar kesehatan reproduksi remaja, pendidikan seks menjadi sangat penting dibangun sebagai sarana untuk meningkatkan pengetahuan kesehatan reproduksi remaja.*

Kata kunci: *Pengetahuan, Kesehatan Reproduksi, Remaja, Miskonsepsi*

Abstract

Background: Adolescents' reproductive health in Indonesia is of growing concern today. Premarital sexual intercourse and unsafe sex behaviors widely found among young people. Lack of reproductive health knowledge was common as the major cause of such risky behavior.

Objective: This study aims to measure level of adolescents' reproductive health knowledge as well as to examine factors related to adolescents' knowledge.

Methode: It was a cross-sectional survey involved 320 secondary school students in Semarang. Semi-school based self-administered questionnaires were employed to collect information on reproductive health and sexual-related knowledge of adolescents.

Result: Sixty percent of adolescents had low reproductive health knowledge. Most of them believed urinating after intercourse and withdraw before ejaculation would prevent them from pregnancy. Some also believe that having sexual intercourse at the first time will not result in pregnancy. Peer and media were found as the primary source of information on reproductive health.

Conclusion: This study indicates low level of knowledge among secondary school students in urban Semarang. Therefore providing sex education at schools will be a good solution in order to increase level of knowledge and prevent them from engaging in risky sexual practice.

Keywords: Adolescents, Reproductive Health, Knowledge, Misconception

BACKGROUND

As well as in their counterpart worldwide, adolescents' sexual behavior in Indonesia also shows a greater risk to unwanted pregnancy and sexually transmitted disease. Although only few large scale studies have been able to find out the exact number due to its sensitivity, premarital sexual intercourse tends to be increasing nowadays. If Indonesian Young Adult Reproductive Health Survey found, of 10 million young people, 1 percent of women and 5 to 6 percent for men admitted openly that they have had sexual intercourse[1, 2], perhaps the findings of small-scale studies on adolescents' sexual attitudes and behavior showed a closer portrayal to reality. Micro studies in Central Java found, dating activities among adolescents was not only holding hands or kissing but way further such as touching their partner's genital, petting and even intercourse[3-9]. Approximately 5 to 20 percent adolescents in Semarang and other urban Central Java had engaged to premarital sex[3, 5, 8-10]. A larger scale study involved 1000 young people in urban Central Java found eighteen percent of males and six percent of females of Central Java's youth had engaged to premarital sexual intercourse [7].

Among determinants factors of adolescents' sexual attitudes and behaviors e.g. self efficacy, parental support/family relation, mass media exposure and peer influence, knowledge was often found as the proximate determinant [11-15]. Indeed, adolescents' risky sexual behavior was mainly caused by their lack of understanding on reproductive health information which failed to be provided either by parents or schools [11, 16-18]. Parents' reluctance in discussing reproductive health matters and limited sex education provided at schools therefore lead the youngsters to find information from the most comfortable sources, their peer and media [1, 2, 19-21]. Thus become a source of concern since in many cases, information provided by peer and media were not intentionaly to be educational. Moreover, media contributes a high risk when its related to the extent of sexually explicit online material [19, 22].

It's still become a debate among community, government and experts regarding the importance of giving sex education for adolescents. Controversy occurred when providing sex education to adolescents is believed will lead them engage in such behavior earlier. With regards to Javanese and most of Indonesian culture, discussion about sex among unmarried young people is considered taboo[14]. Therefore it is unnecessary to provide sex education for adolescents, yet they should avoid involving in such discussion.

On the contrary, moderate groups believed if adolescents are given an adequate of reproductive information they will be more responsible of their own behavior. Finding shows a different level of knowledge among adolescents who were given a sex education program. Adolescents who were given good reproductive health information showed an increasing of reproductive health knowledge and were less likely to engage in risky sexual practice [15, 23].

Currently, reproductive health subject in Semarang and most of Indonesian cities is given integrated to biology or science curriculum at 10th grade. Biology Teachers Association admitted that they were unable to provide adequate reproductive health information since they were also responsible for other subjects. Reproductive health matters are counted for less than 10 percent of total meetings of biology subjects and mostly covered anatomy of reproductive organs only. Although too early to make a conclusion, it is obvious that secondary school students have not received adequate reproductive health information from their schools.

Much has been done in the field of adolescents' reproductive health especially in term of sexual attitudes and behavior. However, only few describe in more detailed in which section of reproductive health knowledge that adolescent mostly mis-understood. Therefore this study aims to measure level of reproductive health knowledge of adolescents including mis-conceptions occurred, their sources of information and factors related to their knowledge. In advance, the finding of this study is expected will support the policy to provide a sex education for adolescents through the best channels.

METHODS

Design, sample and procedures

This study was a cross sectional design conducted on August-September 2008, involved 320 students who randomly selected from two strata, public and private schools in Semarang. Eleventh graders who have received biology curriculum in previous class were selected proportionate randomly using a coin. Researcher walked in a class from the closest seat from the door then asked a student to choose a side of the coin to determine whether he/she involved in the study. Selected students then were given a sealed envelope to be brought home. This step repeated until the minimum number of schools' sample obtained. However, regardless they were involved as respondents or not, all students in selected classes were given souvenirs as reward.

Prior to the implementation of the survey, institutional approval, and adolescents' oral consent were obtained. Respondents were given a brief introduction about the research purposes, assured that their answers would remain anonymous and finally, they were asked to make sure they fill the questionnaire in privacy. They brought the anonymous questionnaire home in a sealed envelope and returned it the next day.

Measures

Self administered questionnaire based on semi-school setting was employed to measure variables. Dependent variable, Reproductive Health Knowledge, was derived from Indonesian Young Adult Reproductive Health Survey 2002-2003[1] and Sexual Lifestyle and Interpersonal Relationship of University Student in Central Java and their Implication for Sexual and Reproductive Health by Shaluhiyah (2006)[7]. This variable was measured as a composite index consisted of 30 questions on pubertal signs, fertile period, risk of pregnancy, knowledge of reproductive health and sexually transmitted infection. Level of reproductive health knowledge was determined based on the limit value 70 percent of total correct answer. Independent variables comprised of demographic characteristic including family characteristic e.g. father and mother education and occupation, family relation, peer influence and various media exposure as sources of reproductive health information. Validity and reliability test were performed to ensure the fitness of the study instrument.

Data Analysis

Chi-square test was employed to analysis in bivariate level whilst logistic regression was employed to analyze at multivariate level.

RESULT

Response rate of this study was generally high (95 percent). Out of 335 respondents, 329 of them returned the questionnaires. However, nine respondents were excluded from analysis since they were not complete the form, and therefore, the total sample was 320 students.

Characteristic of Study Population

Respondents were 11th-grade students of five selected public and private schools in Semarang who have received biology curriculum in the previous year. From 320 subject of study, more than half were female and most of them were Javanese. Nevertheless, there were about 7.8 percent of them were Chinese and the rest were mixed of many ethnics in Indonesia. Although the vast majority of respondent (81.6 percent) were Moslem, there were 18 percent of respondents were Christian, and less than 1 percent were Buddhist. This implied that Semarang as Central Java capital is considered as a complex urban area where many ethnics and cultures are acculturated, thus may cause a shift in young people's cultural values.

The vast majority of respondents (90 percent) living with their parents. Most of them came from urban middle class with mean daily pocket money around IDR 8,500 which mostly spent for entertainment and educational purposes. More than one third of adolescents' fathers were graduated from university and senior high school (40 and 31 percent respectively). On the contrary, more mothers graduated from high school (40 percent) than university (25 percent). Most of fathers were working as businessman (43 percent) or government officer (35 percent) whereas most mothers were unemployment/ housewife (32 percent).

Reproductive Health Knowledge

Generally, more than half of respondents (60.3 percent) had low level of reproductive health knowledge which includes knowledge on pubertal signs, risk on pregnancy and sexually transmitted infections. Most of them were having good knowledge on pubertal sign. They recognized the physiological changes accompanying their puberty as voice changed and hair growth on boys, whereas on girls, puberty was mostly signed with breast development and growth of pubic hair. However, only 78.4 and 66.6 percent respondents considered increasing of sexual desire as the symptoms of puberty on boys and girls.

Table.1 Adolescents Reproductive Health Knowledge

Items of Question of Knowledge on SRH	Incorrect Knowledge	
	n	%
Pubertal signs		
Boys puberty: develop muscle	72	22.5
Boys puberty: change voice	13	4.1
Boys puberty: growth hair	27	8.4
Boys puberty: increasing sexual desire	69	21.6
Boys puberty: wet dream	32	10.0
Girl's puberty: growth hair	30	9.4
Girls' puberty: breast development	22	6.9
Girls' puberty: hip widening	55	17.2
Girls' puberty: Increasing sexual desire	107	33.4
Girls' puberty: menstruation	125	39.1
Fertile Period		
Definition	125	39.1
Period	276	86.2
Perceive risk of pregnancy & STIs		
Can a woman become pregnant if she has sex for the first time?	125	39.1
Can a woman become pregnant if she has sex during the menstrual period?	188	58.8
Can a woman become pregnant if she has never have a menstrual period?	97	30.3
Can a woman become pregnant even i the man withdraws before ejaculation?	217	67.8
Can a woman avoid pregnancy if she urinates after sexual intercourse?	245	76.6
Having sexual intercourse with an infected person without using condoms	31	9.7
Having sex with many people	27	8.4
Kissing a person who has STIs	223	69.7
Using public toilets	138	43.1
Receiving a blood transfusion from a person who has STIs	62	19.4
Using / sharing needles with a person who has STIs	29	9.1
Sharing meals/cups with a person who has STIs	250	78.1
Insect bite	239	74.7
Touching the body of a person who has STIs	145	45.3

Interestingly, respondents' knowledge on fertile period showed a limited level. There were 86.2 percent of respondents had incorrect answer when the actual fertile period was (table.1). Likewise, respondents' knowledge on pregnancy also showed a concern. Misconception occurred since many of them perceived that urinate after sexual intercourse and withdrawal before ejaculation might prevent them from pregnancy. Moreover, thirty nine percent of adolescents had low awareness on the risk of being pregnant at their first sexual intercourse.

Table. 2. Knowledge Distribution by Individual and Family Characteristics

Variable	Male (%)			Female (%)		
	Poor knowledge	Good Knowledge	p-value	Poor knowledge	Good Knowledge	p-value
Fathers' Education						
University	46.5	38.5	0.728	42.6	38.7	0.662
Diploma	8.5	13.8		11.0	11.3	
Senior High School	25.4	27.7		26.5	35.5	
Junior High School	12.7	12.3		12.5	8.1	
Elementary School	1.4	3.1		2.2	3.2	
Other	5.6	4.6		5.1	3.2	
Mother ' Education						
University	28.2	27.7	0.697	22.1	33.9	0.284
Diploma	14.1	12.3		15.6	12.9	
Senior High School	39.4	43.1		41.8	35.5	
Junior High School	5.6	6.2		9.0	6.5	
Elementary School	5.6	7.7		6.6	6.5	
No education	0.0	1.5		0.8	1.6	
Other	7.0	1.5		4.1	3.2	
Fathers' Occupation						
Don't know	1.4	0.0	0.782	1.6	0.0	0.702
Unemployment	0.0	1.5		1.6	0.0	
Farmer	0.0	0.0		0.8	0.0	
Laborer	5.6	4.6		2.5	1.6	
Businessman	42.3	44.6		44.3	43.5	
Government officer	31.0	32.3		37.7	37.1	
Professional	7.0	3.1		0.8	3.2	
Other	12.7	5.1		10.7	14.5	
Mothers' Occupation						
Don't know	0.0	0.0	0.472	0.8	0.0	0.437
Unemployment	25.4	36.9		37.7	24.2	
Farmer	0.0	0.0		1.6	0.0	
Laborer	1.4	3.1		1.6	0.0	
Businessman	32.4	18.5		13.9	21.0	
Government officer	21.1	20.0		23.8	30.6	
Professional	1.4	1.5		1.6	3.2	
Other	16.9	20.0		18.0	21.0	
Family Relation						
Lose	67.6	64.6	0.426	66.2	50.8	0.163
Tight	32.4	35.4		33.8	49.2	
Peer Influence						
Low	54.9	32.3	0.006*	87.7	83.9	0.308
High	45.1	67.7		12.3	16.1	

**) variables significant at bivariate level with p<0.05*

By contrast, respondents' knowledge on STI was quite good. Most of them were aware that having sex with many people and receiving blood transfusion from a person who has STIs might increase the risk of infection. They also perceived that having sex with many people as a high risk behavior. Nevertheless, stigmatization still occured related to disease transmission via sharing meals/cup with person who has STI.
Level of knowledge varied between sexes (table.2), shown by more females were having low level of knowledge compared to their males counterparts (63.2 and 36.8 percent respectively). Bivariate analysis showed that sex was significantly correlated to adolescents' knowledge whilst among other individual and family characteristics, peer influence was the only variable which probably can predict knowledge.

Most of adolescents' father attained higher education (table.2). Nevertheless, father's education failed to explain its correlation to adolescents' knowledge. In all level of male and female adolescents, either with poor or good knowledge, there were more fathers with higher education. Likewise, mothers' education also showed insignificant association. Father and mother occupation were also show no correlation to adolescents reproductive health knowledge. In all groups, irregular patterns drew the relationship between parents' occupation and adolescents' level of knowledge.

Family relation

Most of adolescents were having loose relation with their family. The low family relation was shown by the evidence that most of students seek their friends to share their problems and obtained advises. The lack of parents and child communication was also shown by the finding that most of respondents rarely discuss about sexual reproductive health matters with their parents. Although most of them felt their parents gave them advises frequently, only few of them feel free to express their idea in front of their father. Those adolescents perceived talking to their mother was more comfortable instead of talking to their father. It is possible because mother usually stay home and spends more time with their children than father does.

Peer Influence

It was expected, with the low level of family relation will give a higher rate of peer influence. Unexpectedly, more than half of respondents (68.4 percent) were having low rate of peer influence. Although most of respondents had more than 5 close friends with the length of friendship from 6 months to 1 year, but the frequency of hangout with their peer were limited only after school hours. Term of solidarity probably describe on how respondents perceived of their close friends behavior. Only few of them revealed that their friends accessed porn from printed and visual media. Nevertheless, most of respondent (79.1 percent) admitted that they have friends who's going online and chatting. Bivariate analysis showed that peer influence only significant on male adolescents (table.3). There were more male adolescents with good knowledge having high peer influence whilst among those who had poor knowledge, the proportion of adolescents who have low and high peer influence was not too much different (54 and 45 percent). Unfortunately, this pattern cannot be seen in female adolescents group. Most female adolescents, either who had poor or good knowledge, had low peer influence.

Various media exposure: source of reproductive health knowledge.

Theories suggest adolescents are heavy user of various media. Total time devoted by adolescents to interact with various media reached 54 hours a week in average. These media were included printed media such as magazine, newspaper and comic books as well as visual and digital media such as television and video (VCD/DVD) as well as internet.
Total printed media exposure of adolescents reached 10 hours/week in average. More than half (55 percent) of respondents were low exposed by magazine with mean of exposure ranged from to 2 to 3 hours/week, whilst half of them (50 percent) were low exposed by newspaper with 3-4 hours/week in average. Comic was shown to be the most unpopular media among respondents since most of respondents only access it from never to rarely. As expected, television and internet was found to be the most popular media among adolescents since most of them

interact with those media at any given chances. Adolescents accessed television for 4 hours/day in average or about 28 hours/week whilst internet was being accessed for about 9 hours/week. None of respondents reported never been exposed by these two kinds of media within the previous month of data collection. In addition, male adolescents were found had been exposed to various media more frequent than did females.

Table. 3. Knowledge Distribution by Various Media Exposure

Variable	Male (%)			Female (%)		
	Poor knowledge	Good Knowledge	p-value	Poor knowledge	Good Knowledge	p-value
Magazines						
Never	23.9	12.3	0.008*	19.7	11.3	0.263
Low	57.7	46.2		57.4	58.1	
High	18.3	41.5		23.0	30.6	
Newspaper						
Never	18.3	18.5	0.998	24.6	9.7	0.039*
Low	38.0	38.5		53.3	69.4	
High	43.7	43.1		22.1	21.0	
Comic						
Never	35.2	29.2	0.440	50.0	37.1	0.032*
Low	36.6	32.3		24.6	43.5	
High	28.2	38.5		25.4	19.4	
Television						
Low	54.9	52.3	0.447	58.2	59.7	0.487
High	45.1	47.7		41.8	40.3	
Video						
Never	64.8	55.4	0.173	73.0	54.8	0.011*
Low	35.2	44.6		27.0	45.2	
Internet						
Low	38.0	55.4	0.032*	58.2	53.2	0.313
High	62.0	44.6		41.8	46.8	

**) variables significant at bivariate level with p<0.05*

Most female adolescents reading teenage magazine whilst male adolescents prefer sport magazine. There were only 12.3 percent male adolescents and 1.6 percent female adolescents admitted reading adult magazine. Informations they were obtained from magazine mostly covered puberty (64 percent for male and 83 percent for female adolescents); HIV-AIDS and STD (66 percent male and 78 percent female), then followed by information on pregnancy and contraceptive use.

Unlike magazine, newspaper and comic book were less popular among adolescents. The proportion of adolescents who obtained information on puberty, pregnancy, HIV AIDS and STD were equally distributed and did not show specific patterns. Although comic significantly correlated to female adolescents' reproductive health knowledge, fewer (less than 10 percent) adolescents reported obtained information from it.

Few would deny the popularity of television and other electronic media in this globalization and digital era. Most of adolescents interact with this media more than adolescents in previous time. It was found that most adolescents (up to 75 percent) reported they obtained reproductive health information e.g. puberty, pregnancy, contraceptive use, HIV AIDS and STD from television programs whilst video were less

frequent being used. More than half adolescents had been low exposed by video during the data collection period. The proportion of adolescents who reported had obtained reproductive health information from video also fewer than other media. However, bivariate analysis showed that video significantly associated to female adolescents' knowledge.

As predicted, internet exposure was significantly correlated to adolescents' adolescent level of knowledge, although only on male group. More than half male adolescents with low level of knowledge were being exposed with internet in higher level whilst among male adolescents with higher level of knowledge were being exposed in lower degree.

DISCUSSION

Adolescents' reproductive health in Indonesia is of growing concern today. The rapid social change from a traditional toward a modern society is marked by improved communications and flows of information. Not only affected demographic, economic and education, the integration of global markets has also conveyed norms, values and lifestyles alien to Indonesia's society. These disturbing effects are particularly affecting adolescents and young adults, those most vulnerable to ideas and values of all kinds during their transitional period from childhood to adulthood.

Many studies found unwanted pregnancy, sexually transmitted disease and premarital sexual intercourse occurred as a result of insufficient and incorrect information on reproductive health[14, 24]. Knowledge as a cognitive component has been as an evidence to prevent the youngsters to engage in risky sexual practice which unfortunately failed to be provided by parents or schools[15].

Although many have been done to control biases, however, some limitations of study cannot be avoided. Firstly, this study measured the level of knowledge of adolescent who have received biology curriculum at the previous semester, therefore the selection bias has to be considered in generalizing the result. Secondly, regarding the semi-school self administered questionnaires; as well as mail and web-based surveys, the lack of monitoring in filling the questionnaires could be the limitation of the study.

The vast majority of respondents in this study had low level of knowledge. Newspaper and comic correlated to female adolescents' knowledge whilst internet exposure and peer influence was significant to male's knowledge. Logistic regression showed that only newspaper and peer predicted adolescent level of knowledge in this study. Adolescents who had exposed with newspaper in higher level were 2.5 times more likely to have higher level of knowledge whilst adolescents who have higher peer influence were 1.9 time more likely to have higher level of reproductive health knowledge.

It can be explained, that informations adolescents' gained from newspaper, although they accessed it in a limited quantity of time, was the strongest predictor of their knowledge. This perhaps, the informations provided by newspaper were less likely to have negative excess compared to other media such as television and internet which the extent of sexually explicit material was uncontrollable. Peer in this study had also significantly proven as a good predictor of adolescents' knowledge. This understandable because most of adolescents spent their times with their peers and they are more comfortable to find any information regarding their sexual reproductive health from their peers rather than their parents or teachers[20, 25-27].

As predicted, family characteristic (father and mother education and occupation) and family relation failed to predict adolescents' level of knowledge. The role of parents and family in adolescents live is likely to decrease as they are more involved with their peers[20, 28, 29]. It can be explained by the finding that peers and media was found as the major source of information. It should be noted that even though socioeconomic areas has been rapidly change, some cultural values and norms are persist in Javanese context. Discussion of sex and sexuality among unmarried young people remains a taboo. Parents rarely discuss sexuality or reproduction in explicit terms with their unmarried youth[29]. Cultural barrier seemed to

be the weakest point for adolescents in obtaining reproductive health information from their parents. In the absence of convenient atmosphere to discuss such sensitive topics therefore leads the youngsters to find it from their peers and media.

Although it has been proven that adolescents were lack of reproductive health knowledge, adolescents' recognition to pubertal signs indicated a good result. They had proper knowledge on boys and girls physical changes such as change in voice and development of muscles and growth of facial hair for boys and growth in breasts for girls. However, few respondents mentioned increase in sexual arousal as one of the signs of adolescence in a girl or in a boy.

This result is corresponding with some studies in Indonesia. Dewi (2009) and Indonesian Young Adult Reproductive Health Survey in 2002-2003 and 2007 revealed that for changes in a boy, the most reported change by both female and male respondents was the changed in voice and development of muscles and growth of facial hair. For physical changes in a girl, growth in breasts is a common knowledge among female and male respondents. Few respondents mention increase in sexual arousal as one of the signs of adolescence in a boy or girl[1, 2, 4].

Given the fact that biology curriculum in secondary schools in Semarang covered anatomy and physiology of reproductive organs including puberty, it is not surprising then if adolescents' knowledge on pubertal sign showed a very good result. However, knowledge about the fertile period is deficient among youngsters in this study. This should be a concern since failure in understanding this cycle will increase the risk of unwanted pregnancy among teenagers.

The most provocative finding of this study was misconception on the risk of pregnancy. Common myths include that it is impossible to become pregnant the first time one has sexual intercourse or if the girl urinates after sex or the boy withdraws before ejaculation. Other myths found from previous studies revealed that pregnancy can be avoided if a woman washes her vagina after intercourse or jumps up and down like a frog[4, 7]. These false beliefs put women at higher risk of pregnancy, as they believe they are taking precautions to prevent conception. A deep concern should be addressed to this particular matter because these myths have been quite long spread among adolescents. Five to six years prior to the study, in 2003-2004, Shaluhiyah has already found that adolescents believed urinates, ejaculates, squat-jump and consuming pineapple will prevent them from pregnancy[7]. If today, five to six year later the myth exists, it's indicating that there has been less effort in increasing and correcting adolescents' reproductive health knowledge.

Given that adolescents major source of information were their peer and media[30, 31], it is important to trace back how the pregnancy prevention myths widely spread among them. Let's take an example; adolescents perceived that pineapple may prevent them from pregnancy because many Javanese people believe that consuming pineapple during pregnancy may cause miscarriage. In fact, pineapple consisted of acid that will endanger pregnant women if it being consumed exceeding the normal amount. Urinate and squat-jump after intercourse is believed will drain the sperm from girl's oviduct and therefore may prevent them from pregnancy.

There is no evidence who should be responsible for adolescents' misconception. Adolescents mostly utilize a multitude of informal sources to gain information relating to sexuality and reproduction. Printed materials such as books, magazines, and newspapers are all accessed by literate youth. The information gained from such sources is often partial or incorrect, due to the fact that many of these materials are not intended to be educational. Other forms of mass media and popular culture such as pop music, the internet, satellite television, radio and film also play an increasing role in delivering information about reproduction and sexuality. Again the information and values young people interpret from these sources are rarely produced for that purpose.

Although there are no scientific evidences, many people believe that those myths can truly prevent pregnancy. Rumors and unreliable articles published in the internet

discussing on respective matter are widely found. Adolescents may type 'tips preventing pregnancy' and then google will simply lead them to unreliable sites and discussion. Of course media, especially internet cannot be blamed for adolescents' misconception. Its nature in providing information may bring both promise and concern for its users. Digitally literate adolescents will find a site easily, although their knowledge on reliable sites for reproductive health was limited. If they were aware, they may find a good and reputable source to find such information, but it is also possible they will be trapped by the extent of sexually explicit online material from the internet[32-38].

It is obvious that students need more education, particularly on intimate relationships between males and females, not limited only anatomy of reproductive tracts. Forcing reproductive health information to existing biology curriculum presumably will not show a good result due its limitation on space and time. In public schools, education about reproduction and sexuality is usually limited to a single biology lesson in the first year of high school. The biological processes of puberty and the functions of female and male sex organs are described in brief. These lessons are typically taught in mixed-sex classes, and by teachers who are untrained in providing reproductive/sex education. Student's assessment of this introduction to reproductive education is poor; they regret that the lessons do not provide the opportunity to ask questions or discuss the topic matter in greater detail. In general, retention of the knowledge contained in these biology lessons is poor. This reflects students' low comprehension of material that is typically conveyed via copying lesson notes or pages from a textbook without discussion. Therefore, the need of providing sexual education then becomes a necessary. The belief that sexuality and AIDS education may encourage sexual activity in young people is a powerful barrier to the introduction of HIV/STD prevention programs. However, the data suggest that sex education does not promote an earlier onset or increase in sexual activity and may postpone intercourse. In fact, research indicates that sex education and access to contraceptives can help reduce the rates of unintended and unwanted adolescent pregnancy[15, 23].

CONCLUSION

Low level of reproductive health knowledge among adolescents alarms the importance of sexuality education. The prevalence of misconceptions about the risk of pregnancy among adolescents suggests the need for preventive sexual education not only to decrease potential high-risk behaviors, but also to reduce unnecessary feelings of anxiety regarding susceptibility. The media and peers as the primary source of information then will be good channels in delivering reproductive health information for adolescents.

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